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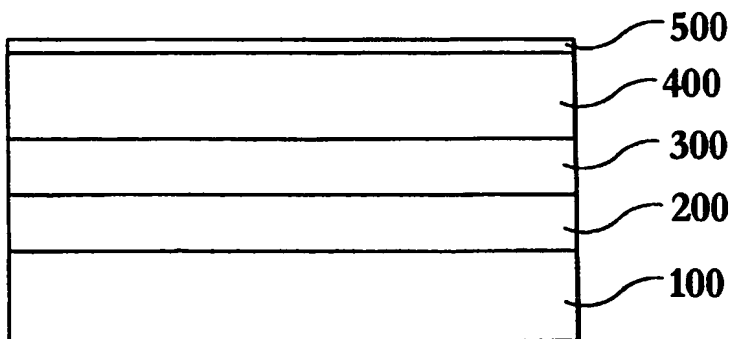
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(75) Inventor/Applicant (*for US only*): **CHOI, Jonghyun** [KR/KR]; Physics, Kyung Hee University, 1, Heogi-dong, Dongdaemun-gu, 130-701 Seoul (KR). For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PHASE TRANSITION METHOD OF AMORPHOUS MATERIAL USING CAP LAYER



(57) Abstract: The present invention provides a phase transition method of an amorphous material, comprising steps of: depositing the amorphous material on a dielectric substrate; forming a cap layer on the amorphous material; depositing a metal on the cap layer; and crystallizing the amorphous material. According to the present invention, the surface of the amorphous material is protected by the cap layer, so that clean surface can be obtained and the roughness of the surface can be remarkably reduced during thermal process and sample handling. In addition, the cap layer is disposed between the amorphous

material and the metal to diffuse the metal, so that the metal contamination due to the direct contact of the metal and the amorphous material in the conventional method can be remarkably reduced.

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